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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/006,040	12/04/2001	Thomas Birnbaum	000423	9559	
7	7590 03/03/2003				
QUALCOMM Incorporated Attn: Patent Department 5775 Morehouse Drive			EXAMINER		
			CLINGER, JAMES C		
San Diego, ÇA 92121-1714			ART UNIT	PAPER NUMBER	
			2821		
			DATE MAILED: 03/03/2003	DATE MAILED: 03/03/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.

10/006,040

Applicant(s)

Birnbaum et al.

# Office Action Summary

Examiner

Jim Clinger

Art Unit **2821** 

	The MAILING DATE of this communication appears of	on the cover s	heet with	the correspondence address			
	or Reply						
THE N	A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136 (e). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the						
	ions of time may be available under the provisions of 37 CFR 1.136 (a). In n I date of this communication.	io event, however	, may a reply b	e timely filed after SIX (b) MONTHS from the			
- If NO p - Failure - Any re	period for reply specified above is less than thirty (30) days, a reply within the period for reply is specified above, the maximum statutory period will apply an to reply within the set or extended period for reply will, by statute, cause the ply received by the Office later than three months after the mailing date of th patent term adjustment. See 37 CFR 1.704(b).	nd will expire SIX ( application to be	6) MONTHS fr	om the mailing date of this communication. NED (35 U.S.C. § 133).			
Status							
1) 💢	Responsive to communication(s) filed on <u>Dec 4, 200</u>	01		•			
2a) 🗌	This action is <b>FINAL</b> . 2b)   ✓ This action	on is non-fin	al.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.							
Disposi	tion of Claims						
4) 💢	Claim(s) <u>1-30</u>			is/are pending in the application.			
.4	la) Of the above, claim(s)			is/are withdrawn from consideration.			
5) 🗆	Claim(s)			is/are allowed.			
6) 💢	Claim(s) 1-30		J	is/are rejected.			
7) 🗆	Claim(s)			is/are objected to.			
8) 🗆	Claims	a	re subject	to restriction and/or election requirement.			
Applica	ition Papers						
9) 🗆	The specification is objected to by the Examiner.						
10)💢	The drawing(s) filed on May 21, 2002 is/are	а) 💢 ассер	ted or b)[	$\square$ objected to by the Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11)	The proposed drawing correction filed on	<del> </del>	is: a)□ a	approved b) $\square$ disapproved by the Examiner.			
	If approved, corrected drawings are required in reply t	o this Office	action.				
12)	The oath or declaration is objected to by the Examin	ner.					
	under 35 U.S.C. §§ 119 and 120						
13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) [	☐ All b)☐ Some* c)☐ None of:						
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
	<ol> <li>Copies of the certified copies of the priority do application from the International Burea ee the attached detailed Office action for a list of the</li> </ol>	au (PCT Rule	17.2(a)).	•			
14)			•				
<ul> <li>14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).</li> <li>a)  The translation of the foreign language provisional application has been received.</li> </ul>							
15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachm		, = 12, 01100					
	otice of References Cited (PTO-892)	4) Interview	Summary (PTC	0-413) Paper No(s)			
2) No	otice of Draftsperson's Patent Drawing Review (PTO-948)	5) Notice of	Informal Pater	t Application (PTO-152)			
3) 🗌 Im	formation Disclosure Statement(s) (PTO-1449) Paper No(s).	6) Other:					

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#### **DETAILED ACTION**

#### Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14, this claim is vague because there appears to be missing a word in line 5.

#### Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in-
- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).
- 4. Claims 1-10, 13-17, 19-28 and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Honda et al.(6,414,642).

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Claims 1-2, 17, 28 and 30, figure 2 discloses a shield(16 and 18) and a spaced apart antenna(40) in electrical current communication.

Claims 3 and 19, a PIFA is disclosed(col. 1, lines 54-55).

Claims 4 and 20, a slot antenna is disclosed(fig. 2, no. 40).

Claims 5 and 21, a dipole antenna is disclosed(col. 1, lines 37-38).

Claims 6-7 and 22-23, the antenna and shield are formed from a metallic conductor.

Claims 8-10, stamping from a sheet and other related known procedures are disclosed(col. 4, lines 20-22).

Claims 13 and 24, a feed(32) is disclosed as a source.

Claims 14-16 and 25-27, figure 1 discloses a printed wiring board(6) with electric circuitry as recited connected to the antenna feed(38).

#### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 11-12, 18 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda in view of Kushihi et al.(6,433,746).

Honda does not disclose molded antenna components or a spacer.

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Claims 11-12, figure 1 of Kushihi discloses a type of substrate(2) which is commonly manufactured by molding as the support for a shielded antenna element.

Claims 18 and 29, figure 1 of Kushihi discloses a spacer between the shield(8) and the antenna(1) for positioning the shield relative to the antenna(3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the spacer and dielectric disclosed in Kushihi with the antenna device disclosed in Honda to position the shield and to support the antenna element as disclosed in Kushihi.

### Correspondence

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Jim Clinger whose phone number is (703) 305-0619.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center whose telephone number is (703) 308-0956.

Papers related to Technology Center 2800 applications only may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center Fax Center number is (703) 308-7722 or (703) 308-7724.

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